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Bag making device

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**Patent claims**

1. Bag making device for cross base bags in which tube sections (1) for cross base bags are processed whereby the bag making device has the following characteristics:
  - several working stations (30, 31) that implement different working steps on the tube sections (1),
  - whereby at least one working station (30, 31) is equipped with a tool that is mounted on a tool roller (7, 9) and that runs through its working position during each rotation of the roller (7, 9), at least one conveyor system (3, 4, 6) that conveys the tube sections (1) through several working stations (30, 31) and consists essentially of conveyor belts (3) that are driven by transport discs (4),
  - a drive system (5, 12) that drives the drive wheels (4) and the tool rollers (7, 9) and coordinates their rotary motions such that at each time one tube section (1) runs through at least one working station (30, 31) while the tool roller (7, 9) completes a rotation**characterized by the fact that**

- the drive wheels (4) can be driven by the drive system (5, 12) with lesser angular speed than the tool roller (7, 9) and that
- the drive wheels (4) have a larger diameter than the tool rollers (7, 9).

2. Bag making device in accordance with claim 1,

**characterized by**

a drive system (5, 12) that defines a ratio of  $\frac{2}{3}$  between the angular speed of the drive wheels (4) and angular speed of the tool rollers (7, 9).

3. Bag making device in accordance with one of the aforementioned claims

**characterized by**

a drive system (5, 12) that diverges torque moment for at least one drive wheel (4) from a line gear (12) with the help of a bevel gear (20) and transfers it via a planetary gear (21) placed below to the drive wheel (4).

4. Procedure for the processing tube sections (1) in cross base bags that has the following characteristics:

- the implementation of several working steps on the tube sections (1) whereby the working steps are carried out in different working stations (30, 31),
- whereby in at least one working station (30, 31) a working step is performed with a tool that is mounted on a rotating tool roller (7, 9) and that runs through its working position during each rotation of the roller (7, 9),
- the conveyance of the tube sections (1) through the working stations (7, 8, 9, 10) with conveyor belts (3) that are driven by drive wheels (4),

- the drive of the drive wheels (4) and tool rollers (7, 9) whereby the rotary motions of both aforementioned types of rollers (4, 7, 9) are aligned such that at each time one tube section (1) runs through at least one working station (730 [sic], 31), while the tool roller (7, 9) completes a rotation,

**characterized by the fact that**

- the drive wheels (4) are driven with lesser angular speed than the tool roller (7, 9).

5. Procedure in accordance with claim 4

**characterized by the fact that**

ratio of the angular speed of the drive wheels (4) to that of the tool rollers (7, 9) amounts to  $2/3$ .